

# Annual Report 2000 of the Environmental Finance Center Network

Environmental Finance Center Network

2000 Annual Report

## EFC at the University of Maryland

### The University of Maryland EFC focuses on the Chesapeake Bay Watershed

The Environmental Finance Center (EFC) at the University of Maryland, the second such center to be established in the country, serves the states of Maryland, Virginia, Pennsylvania, West Virginia and Delaware (EPA Region III). The focus of the Maryland EFC has fallen primarily on the Chesapeake Bay watershed, a sprawling 64,000 square mile area that encompasses much of the region. The problems found in the Bay watershed, from sewage treatment to agricultural runoff to suburban sprawl, represent the very issues faced by communities in the region and addressed by the EFC.

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### ACCOMPLISHMENTS

#### Technical Assistance

#### *Anne Arundel County Maryland Stormwater management outreach initiative*

Sensitive ecosystems within the highly urbanized Anne Arundel County Parole Town Center are progressively degrading under the pressure of stormwater runoff. All stakeholders including residents, businesses, the development and consultant community, and government must work together in creative partnership to undergo significant cultural change to reverse historical trends.

The EFC was invited to work with Anne Arundel County

to assist in bringing about a "revolutionary cultural change" in how development and stormwater management takes place in Parole Town Center. As part of the initiative, the EFC is assisting the County in forming and facilitating a stakeholder's "stormwater task force" to help implement an educational effort as



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well as advise the County about issues related to stormwater management. This year-long pilot project will be the first of many on-the-ground initiatives to move the county, both government, business and residential, to a new paradigm for managing stormwater management in highly urbanized areas.

#### *Lineboro, Maryland failing septic systems*

Lineboro, Maryland is a small, unincorporated town on a branch of the Little Gunpowder Falls, a Class 2 trout stream and a tributary of the Pretty Boy Reservoir, which provides drinking water for the city of Baltimore. The town's failing septic systems have been an issue for many years.

The Maryland EFC has been working to bring the community, county and state agencies together in a coordinated effort to solve Lineboro's wastewater dilemma. Part of the EFC's assistance was to facilitate a meeting between stakeholders to resolve appropriate technology and management responsibility issues. The EFC Training Manager helped by preparing a list of financing sources which could be used by the County to fund a preliminary engineering study to help move the project along.

#### *Patuxent River Greenway*

The Patuxent River is Maryland's largest intrastate river, with a 950 square mile watershed including seven counties. In an effort to protect the Patuxent watershed a group of citizens formed the Patuxent Greenway Steering Committee. The goal of the committee is to create a sustainable greenway that preserves the Patuxent River corridor and surrounding communities, including several historic African-American communities. There is concern within these communities that a greenway would increase property values, possibly pricing residents out of their homes.

The EFC was asked to analyze the possible impacts the greenway would have on various communities in the watershed. As a result of the study, the EFC was asked to become a permanent member of the committee to provide assistance about financial, economic, and strategic issues related to the greenway and its development.

#### *Green Infrastructure course*

The EFC is working with partners, including The Conservation Fund, USDA Forest Service, the National Park Service's Rivers, Trails and Conservation Assistance Program, Maryland Department of Natural Resources, the U.S. Environmental Protection Agency, and American Farmland Trust to develop a new 3-day "green infrastructure" course. Through lecture, case studies and class exercises, participants will learn practical information on the planning and design of innovative interconnected green space systems and on integrating green infrastructure into day-to-day land use decisions and practices at the state, regional and local level.

The pilot course is tentatively scheduled for April 30-May 3, 2001 and will be conducted at the National Conservation Training Center in Shepherdstown, West Virginia.

#### *Hampshire County, West Virginia*

Rural Hampshire County, West Virginia, with a population of about 15,000, is experiencing growth pressure from the D.C. and Northern Virginia areas.

With the highest rate of sprawl in West Virginia, as measured by rate of subdivided land, there is fear among many residents that unplanned growth could threaten the character of their community. In an effort to devise a framework for development, the Hampshire County Comprehensive Planning

Committee is developing a comprehensive plan which will be the first of its kind in the state.

The EFC is advising the planning committee, helping them address environmental and financing issues inherent with the planning process.

*The Elizabeth River Watershed (Virginia) urban stormwater management*

The Elizabeth River watershed, which includes the highly urbanized areas of Norfolk, Hampton, Portsmouth, Chesapeake and Virginia Beach, faces an uphill battle in managing stormwater runoff. Because of the lack of open land and high cost of implementing traditional stormwater management techniques, a concerned group of stakeholders would like to conduct a series of workshops and charrettes to explore options and alternatives. The EFC has been invited to assist them.

The stakeholder group includes the Hampton Roads Planning District Commission, Virginia's Department of Conservation and Recreation, the Regional Stormwater Management Committee, the Elizabeth River Project (non-profit), Virginia Cooperative Extension, and the Virginia chapter of the American Public Works Association. The EFC is providing guidance and information about innovative methods for stormwater retrofits and financing. In addition, the EFC is helping to organize and will speak at a workshop, on January 31, 2001, which will highlight innovative stormwater management techniques and introduce four pilot sites which will be the subject of a charrette on March 29, 2001. The EFC will facilitate the charrette and continue to work with the stakeholder group as it begins the process of implementation.

*Maryland Nutrient Cap Strategy workgroup*

The 1987 Chesapeake Bay Agreement, as amended in 1992, set a goal to reduce pollutant levels of nitrogen and phosphorus by 40% by 2000, and to maintain that reduction thereafter. In Maryland, a Nutrient Cap Strategy Workgroup, consisting of tributary team members, stakeholders, and state and local staff, have been working since September 1999 to evaluate the issues and options and develop a nutrient cap strategy.

The EFC was invited to serve on the Maryland Cap Strategy Workgroup and has advised the group about ways in which to offset expected growth, including using innovative financing incentives and disincentives to direct future growth into planned locations. The workgroup will be submitting a report to the Governor on March 31, 2001. As part of that report, the EFC drafted the "financial strategies" section, which discusses the benefits of a multi-stakeholder financial planning approach.

*Oil Spill Prevention Advisory Task Force (Maryland)*

The EFC Coordinator was appointed by Maryland Governor Glendening to serve on the Oil Spill Prevention Advisory Task Force which was convened in response to the Potomac Electric Power Company's Chalk Point oil spill which occurred on the Patuxent River in March 2000. The Task Force is looking at all modes of oil transportation (marine, pipeline, tanker truck, and rail) to make regulatory recommendations to the Governor for potential legislation during the 2001 General Assembly. A final report was delivered to the Governor in December 2000.

**Training**

*Financing Tools to Support Management of Water Resources: Rate Design Training*

The protection of public health, through the provision of safe drinking water, is recognized as a key factor in the quality of life of citizens in the Bay watershed, as elsewhere; and drinking water, like waste water, forms a key component of the many services provided by local governments. While drinking water and waste water systems must be expertly maintained to help ensure that clean water is available for both human consumption and wildlife habitat, these systems must not become a drain on local government budgets — in fact, they should be financially self-supporting.

Utility rates offer a primary mechanism for capturing most of the costs of operating and maintaining water and waste water systems and can ensure that they are self-supporting.

The Maryland EFC offers rate design workshops to elected officials, utility operators, engineers and others interested in the concepts and technicalities of good financial management. During the year, the EFC conducted a series of full- and half- day Rate Training Workshops, including:

*West Virginia, co-sponsor: West Virginia Rural Water*

April 11: Lewisburg

April 13: Keyser

*Virginia, co-sponsor: Virginia Rural Water Association*

June 20: Fredericksburg

June 21: Farmville

June 22: New Market

*Delaware, co-sponsor: The Delaware Environmental Training Center at Delaware Technical and Community College*

November 21: Georgetown

Some comments from participants about the EFC Training Workshops:

- < *"It gave me a new awareness of how to develop the rates and how we'll work at that"*
- < *"We need to be more detailed in our budgeting and future planning procedures."*
- < *"Gives a broader view public awareness."*
- < *"Reaffirmed what I thought needed [to] be done to revise rates policy"*
- < *"Session [was] very informative"*

The EFC has also developed training on Capital Improvements Programming for small communities which have little or no experience in developing and implementing a plan. Both West Virginia and Virginia Rural Water Associations have expressed an interest in these training workshops

The EFC continues to work with many partners in offering rate design workshops throughout the region.

### Charrettes

*The Bay Ridge Trust (Maryland) preserving open space*

On May 8, 2000, the EFC conducted a charrette with the Bay Ridge Trust investigating options for purchasing the remaining open space in the community.

Bay Ridge, near Annapolis, Maryland, contains 114 acres of contiguous riparian forest known as the Big Woods. The Trust would like to arrange funding to purchase the land. The current owners have begun

the process to develop the land, so development appears imminent.

The EFC conducted a charrette with the Trust, attended by over fifteen residents and eight panelists, which resulted in a series of recommendations useful to land trusts and non-profit organizations seeking ways to preserve important ecological lands.

#### *Hundredfold Farm (Pennsylvania) affordable green building techniques*

On August 5, 2000, the EFC conducted a charrette in Gettysburg, Pennsylvania to discuss development and financing strategies for the Hundredfold Farm co-housing community, a 15-unit clustered housing development on 5 acres of an 80-acre Christmas tree farm located near the headwaters of Marsh Creek. The goal of the charrette was to assist the community in their efforts to build an affordable community using green building techniques and low impact development strategies.

The charrette, attended by ten panelists and eleven community members, developed recommendations for integrating affordable green building techniques into community designs.

### **NEW INITIATIVES FOR 2001**

In the coming year, the Maryland EFC will continue to work closely with its partners in the EFC Network. Part of current Network-wide planning now underway is the enhancement of cooperative efforts among the centers on targeted issues, such as source water protection.

### **EFC NETWORK COLLABORATIONS**

*Hyannis Park, Cape Cod, Massachusetts failing septic systems*

The EFC collaborated with the EFC at the University of Southern Maine (Region 1) to develop and conduct a charrette for the community of Hyannis Park on Cape Cod. The objective of the September 21, 2000 charrette was to identify innovative funding sources for a new community wastewater treatment system for the Greater Hyannis Park and Mill Creek Watershed Restoration District. The Maryland EFC Coordinator moderated the charrette. Because the Maryland EFC pioneered the use of the charrette in addressing environmental finance issues, it continues to assist others interested in developing expertise in conducting charrettes.

#### *Clean Water Action Plan Pilot Training Workshops*

In order to address a need for better understanding of watershed-based financing techniques, the EFC has developed a training workshop which promotes the coordination of funding and technical assistance programs with innovative financing techniques to support watershed management. The framework for the training workshops is the Clean Water Action Plan (CWAP).

The full-day training begins by identifying a range of public programs available for watershed activities, and then explores a variety of financing techniques useful for watershed management. The rest of the day is devoted to a hands-on learning experience using a case study in small breakout groups. The course suggests a new paradigm on how to think about financing in an integrated, rather than separate, way.

During year 2000, Maryland's EFC offered training workshops in conjunction with Clean Water Action Roundtables in Chicago (May 12) and Portland, Oregon (September 8). The Portland training was a joint effort with EFC 10 at Boise State University and

has led to additional training opportunities throughout the Pacific Northwest and Alaska.

In addition, as part of our collaboration with the EFC Network, the EFC at the University of North Carolina at Chapel Hill made the Region 4 CWAP Roundtable presentation in Birmingham, Alabama on August 25.

Our plan is to make this model available nationally, and, if future support is secured, to offer the workshop throughout the country, as a joint operation with the Environmental Finance Center Network.

#### *Sustainable Urban Areas: Guiding Growth*

The Maryland EFC, in coordination with the Environmental Finance Center Network, examined the long-term sustainability of urban areas and their relationship to regional patterns of development through a series of four charrettes held regionally around the country. The Maryland EFC assisted each EFC in designing and developing their charrette, while the Maryland EFC Director facilitated the four charrettes. The four charrettes and our co-collaborators, included:

- < July 1999, Charlotte, North Carolina - EFC at UNC (Region 4)
- < March 3, 2000, Cleveland, Ohio - EFC at Cleveland State University (Region 5)
- < April 4, 2000, Bayview/Hunters Point district of San Francisco - EFC9 at California State University-Hayward, (Region 9)
- < October 3, 2000, Houston's Western Fifth Ward - EFC at the University of New Mexico, (Region 6)

#### *Source Water Protection initiative*

The University of New Mexico, on behalf of the Environmental Finance Center Network (EFCN), received an award from US EPA's Office of Ground Water and Drinking Water to assist with resource-based or unified source water protection. The goal of the project is to create a diverse toolbox of techniques available for a wide range of audiences wishing to address drinking water source protection. Four EFCs will collaborate on the project, led by the UNM EFC, and including the EFC @ UNC, Boise State University and the Maryland EFC.

The Maryland EFC portion of the Network project is to better incorporate the source water protection efforts of small to mid-sized communities into a larger watershed protection context in the Potomac River watershed. To reach this goal, the EFC will work with two or three communities to develop a source water protection plan. The EFC will coordinate its efforts with organizations such as the Interstate Commission on the Potomac River Basin as it guides these communities towards plan implementation. The Project is expected to begin during early 2001.

#### **PRESENTATIONS- CONFERENCES- MEETINGS**

##### *National Watershed Outreach Conference*

The EFC was selected as a "table topic" discussion session at the National Watershed Outreach Conference held on April 18 in San Diego. The 1 ½-hour discussion, facilitated by an EFC associate, focused on "Paying for Riparian Forest Buffers." The session was designed to help participants provide information to elected officials and citizens about ways in which forests can contribute to the economy.

*Maryland Rural Water Association 2000 Technical Conference*

On April 30 and May 1, the EFC set up an exhibit and conducted a one-hour session at the Maryland Rural Water Association's Annual Meeting. The session presented basic principles and methods of utility rate setting with an emphasis on ensuring a sustainable utility and how financial capacity relates to requirements of the Safe Drinking Water Act Amendments.

*Maryland Municipal League's Annual Conference*

On June 14, the EFC Training Manager participated in a two hour presentation at the Maryland Municipal League Convention, along with representatives from Maryland Rural Water and the Water and Wastewater Operators Association of Maryland, Delaware and D.C. About 142 elected and appointed municipal officials attended the two-hour session entitled, "EPA Impacts on Water and Sewer Systems: Monitoring and Reporting Guidelines." The EFC presentation focused on the financial components of capacity development as related to the Safe Drinking Water Act ("SDWA") Amendments and capacity evaluation programs being implemented in Maryland.

*Virginia 7<sup>th</sup> Annual Watershed Conference*

The EFC, working with Virginia State officials and local government representatives assisted in developing Virginia's 7<sup>th</sup> Annual Watershed Conference, held November 29- December 1, 2000 in Williamsburg. This conference, which attracted over 400 participants, addressed urban initiatives such as stormwater management, rural/agricultural initiatives including nutrient trading, Total Maximum Daily Loads

(TMDLs), Low Impact Development techniques, sustainable communities and environmental education.

The EFC delivered a double session on environmental finance, focusing on financing stormwater management, and wetlands protection. Both sessions were well attended and resulted in many follow-up requests for assistance from the EFC.